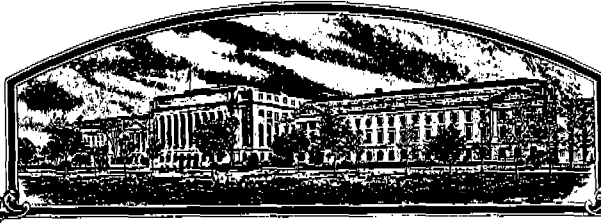


No.

8200109



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Royal Sluis

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF **LAW** IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE **LAW**.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* YEARS FROM THE DATE OF THIS GRANT. SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY **LAW**, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT (34 STAT. 2542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

CAULIFLOWER

'Cervina'



In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 21st day of July in the year of our Lord one thousand nine hundred and eighty-three.

Attest:

Kenneth Howard

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

John R. Block

Secretary of Agriculture

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: See Reverse.

No certificate for plant variety protection may be issued unless a completed application form has been received (5 U.S.C. 5531).

1e. TEMPORARY DESIGNATION OF VARIETY Cervina		1b. VARIETY NAME Cervina		FOR OFFICIAL USE ONLY PV NUMBER 8200109	
2. KIND NAME Cauliflower		3. GENUS AND SPECIES NAME brassica oleracea var. botrytis		FILING DATE 4/21/82	TIME 2:30 P.M.
4. FAMILY NAME (BOTANICAL) Crucifers		5. DATE OF DETERMINATION August 1977		FEE RECEIVED \$ 500.00 \$ 250.00	DATE 4/21/82 6/28/83
6. NAME OF APPLICANT(S) Royal Sluis		7. ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP code) P.O. Box 22, 1600 AA ENKHUIZEN, Holland		6. TELEPHONE AREA CODE AND NUMBER 02280-2741	
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: (Corporation, partnership, association, etc.) association			10. IF INCORPORATED, GIVE STATE AND DATE OF INCORPORATION		11. DATE OF INCORPORATION

12. NAME AND MAILING ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS:
Royal Sluis, P.O. Box 22, 1600 AA ENKHUIZEN, Holland

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- ☐ 13A. Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)
- ☐ 13B. Exhibit B, Novelty Statement.
- ☐ 13C. Exhibit C, Objective Description of the Variety (Request form from Plant Variety Protection Office.)
- ☒ 13D. Exhibit D, Additional Description of the Variety.

14a. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a). (If "Yes," answer 14B and 14C below.) ☐ YES ☒ NO

14b. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? ☐ YES ☒ NO

14c. IF "YES," TO 14B, HOW MANY GENERATIONS OF PRODUCTION BEYOND BREEDER SEED? ☐ FOUNDATION ☐ REGISTERED ☐ CERTIFIED

15a. DID THE APPLICANT(S) FILE FOR PROTECTION OF THIS VARIETY IN OTHER COUNTRIES? ☒ YES ☐ NO (If "Yes," give name of countries and dates.)

Holland 5/1/80

15b. HAVE RIGHTS BEEN GRANTED THIS VARIETY IN OTHER COUNTRIES? ☐ YES ☒ NO (If "Yes," give name of countries and dates.)

16. DOES THE APPLICANT(S) AGREE TO THE PUBLICATION OF HIS/HER (THEIR) NAME(S) AND ADDRESS IN THE OFFICIAL JOURNAL? ☒ YES ☐ NO

17. The applicant(s) declare(s) that a viable sample of basic seed of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Act.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

8th March, 1982
(DATE)

J.G. Timmerman
(SIGNATURE OF APPLICANT)

(DATE)

(SIGNATURE OF APPLICANT)

INSTRUCTIONS

GENERAL: Send an original copy of the application and exhibits, at least 2,500 viable seeds, and \$500 fee (\$250 filing fee and \$250 examination fee) to U.S. Dept. of Agriculture, Agricultural Marketing Service, Livestock, Poultry, Grain and Seed Division, Plant Variety Protection Office, National Agricultural Library Building, Beltsville, Maryland 20705. (See section 180.175 of the Regulations and Rules of Practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below,

ITEM

- 5 Give the date the applicant determined that he had a new variety based on (1) the definition in section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- 13a Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method; (2) the details of subsequent stages of selection and multiplication; (3) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4) evidence of uniformity and stability,
- 13b Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties: (1) identify these varieties and state all differences objectively; (2) attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form, for all characteristics for which you have adequate data.
- 13d Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe, such as, plant habit, plant color, disease resistance, etc.
- 14a If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety **has either** been sold and so labeled, his decision published, or the certificate has been issued. However, if the applicant specified "NO," he may change his choice. (See section 180.16 of the Regulations and Rules of Practice.)
- 15a See section 42 of the Plant Variety Protection Act and section 180.7 of the Regulations and Rules of Practice.

cauliflower CervinaExhibit 13A pedigree

Cervina has been selected from a cross of Dok Elgon with a later maturing breeding line.

Through family selection and line selection in a later stage, Cervina has been derived.

Cervina appears to be stable and uniform through several years of multiplication.

Exhibit 13B, novelty statement

Cervina is most similar to Dok Elgon, but it is maturing later, and leaves grow more erect.

In 12 plantings over 3 years (2 locations, early autumn and late autumn), 50% harvest was 10 days later than Dok Elgon (s = 0, n = 12). Plantheight of Cervina was 35 cm (s = 4, n = 100) while Elgon's was 28 cm (s = 3, n = 100).

(Holland, October 1981)

Exhibit 13D, additional description

Cervina is a medium late variety, selected for autumn cropping. Plantvigour is very good in its class, allowing cropping in areas where Dok Elgon lacks vigour.

ADDENDUM TO EXHIBIT H (PER APPLICANT'S LETTER OF 3/23/83.

'NO VARIANTS HAVE BEEN OBSERVED IN 'CERVINA' THROUGH THE LAST 2 YEARS OF MULTIPLICATION. 'CERVINA' CAN BE MAINTAINED AND REPRODUCED THROUGH SEED WITHOUT CHANGING ITS CHARACTERISTICS.'

RJS 3/28/83

U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782
OBJECTIVE DESCRIPTION OF VARIETY
CAULIFLOWER
(Brassica oleracea var. botrytis)

NAME OF APPLICANT(S) Royal Sluis	VARIETY NAME OR TEMPORARY DESIGNATION Cervina
ADDRESS (Street and/or P.O. Box, F.D. No., City, State and ZIP Code) P.O. Box 22, 1600 AA ENKHUIZEN, Holland	FOR OFFICIAL USE ONLY PVPO NUMBER 8200109

Place the appropriate number that describes the **variety** character of this **variety** in the **boxes** below.
Place a **zero** in first box (e.g., **089** or **09**) when number is either 77 or less or 9 or less.

1. REGION OF ADAPTATION: (Where best adapted in the U.S.A.)

6	1 = NORTHWEST	2 = NORTHCENTRAL	3 = NORTHEAST	4 = SOUTHEAST	5 = SOUTHWEST
	6 = MOST REGIONS				

2. SEASON: (Main crop)

1 = LATE FALL-EARLY WINTER	2 = LATE WINTER -EARLY SPRING
3 = LATE SPRING - EARLY SUMMER	4 = LATE SUMMER - EARLY FALL

3. MAWR ITV: (Days to 50% harvest)

115 FROM TRANSPLANTS	25 NO. DAYS HARVESTING PERIOD
105 FROM DIRECT SEEDING	

4. PLANT HEIGHT: (At harvest)

35 CM. FROM SOIL LINE TO TOP OF CURD	
m6 CM. TALLER THAN	5
 CM. SHORTER THAN	

1 = EARLY ERFURT 2 = SUPER SNOWBALL A
3 = SNOWBALL Y
4 = VEITCH AUTUMN GIANT
5 = OTHER (Specify) **D o k Elgon**

5. LEAVES:

23 TOTAL NUMBER	60 CM. AVERAGE LENGTH AT MID-POINT OF PLANT (Including Petiole)
	30 CM. AVERAGE WIDTH AT MID-POINT OF PLANT
1 = STRAIGHT MARGINS 2 = WAVY MARGINS	2 1 = THIN VEINS 2 = THICK VEINS
1 1 = MOSTLY SESSILE 2 = MOSTLY PETIOLATE 3 = EQUALLY SESSILE AND PETIOLATE	
3 COLOR: 1 = LIGHT GREEN 2 = MEDIUM GREEN (Snowball Mo. 10) 3 = DARK GREEN (Lecor Group) 4 = BLUSH GREEN (November)	1 1 = UPRIGHT, EXPOSE CURD 2 = INCURVED, PARTIALLY COVER CURD 3 = COMPLETELY COVER CURD (Self blanching)

6. CURD:

18 CM. DIAMETER	12 CM. DEPTH
------------------------	---------------------

6. CURD:

8200109

☐ 1 = TIGHT 2 = LOOSE ☐ 3 SHAPE: 1 = FLAT 2 = SEMI-DOME
☐ 2 1 = SMOOTH 2 = KNOBBY 3 = DOME
☐ 1 1 = BRIGHT WHITE 2 = CREAMY, DULL WHITE ☐ 1 1 = NO LEAVES IN CURD 2 = LEAVES IN CURD
 COLOR: 3 = PURPLE-GREEN

7. DISEASE RESISTANCE: (0 = Not Tested; 1 = Susceptible, 2 = Resistant. Specify race if known)

<input type="checkbox"/> BLACK SPOT	<input type="checkbox"/> CLUBROOT
<input type="checkbox"/> PHYTOPHTHORA ROOT ROT	<input type="checkbox"/> WHITE BLISTER
<input type="checkbox"/> BLACK ROT	<input type="checkbox"/> BOTTOM ROT
<input type="checkbox"/> CERCOSPORELLA LEAF SPOT	<input type="checkbox"/> DOWNY MILDEW
<input type="checkbox"/> POWDERY MILDEW	<input type="checkbox"/> VERTICILLIUM WILT
<input type="checkbox"/> BLACK LEG	<input type="checkbox"/> CAULIFLOWER MOSAIC
<input type="checkbox"/> RING SPOT	<input type="checkbox"/> TURNIP YELLOW MOSAIC
<input type="checkbox"/> YELLOWS	<input type="checkbox"/> WIRE STEM
<input type="checkbox"/> OTHER (Specify) _____	

8. OTHER RESISTANCE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

<input type="checkbox"/> 2 "BUTTONING"	<input type="checkbox"/> 0 "BLINDNESS"
<input type="checkbox"/> 2 "RICEYNESS"	<input type="checkbox"/> 0 "WHIPTAIL"
<input type="checkbox"/> 0 INSECT (Specify) _____	

9. INDICATE A VARIETY THAT MOST CLOSELY RESEMBLES THAT SUBMITTED:

CHARACTER	VARIETY	CHARACTER	VARIETY
MATURITY	Dok Elgon	PLANT COLOR	Dok Elgon
ADAPTATION	Dok Elgon	CURD SIZE	Dok Elgon
PLANT HABIT	Dok Elgon	CURD SHAPE	Dok Elgon
PLANT SIZE	Dok Elgon	CURD COLOR	Dok Elgon

REFERENCE:

Nieuwhof, M. 1969. Cole Crops World Crop Series, Leonard Hill.

COMMENTS: